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California Thompson Seedless Grapes: Marketing Channels and Farm-to-Retail Margins, 1948

by

Jerry Foytik

Results of a Study Conducted by the
California Agricultural Experiment Station
in Cooperation with the
United States Department of Agriculture,
Bureau of Agricultural Economics, and the
California Farm Bureau Federation

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California Thompson Seedless Grapes: Marketing Channels and Farm-to-Retail Margins, 1948

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Introduction

This report describes the distribution channels utilized and the marketing margins incurred in moving fresh Thompson Seedless grapes from producing areas to the housewife. It relates to one phase of a larger study undertaken in 1948 jointly by the California Farm Bureau Federation, the United States Department of Agriculture, Bureau of Agricultural Economics, and the California Agricultural Experiment Station. The over-all investigation was made in an endeavor to provide a basis for suggesting possible improvements in the marketing of fresh fruits and vegetables produced and consumed within California.

Although drying is the major outlet for Thompson Seedless grapes, substantial quantities are utilized for fresh consumption within the state. The amount so used constitutes an important portion of the total supply of California-grown fresh fruits and vegetables sold locally. As in the case of the other fresh fruits and vegetables, a variety of marketing methods are employed in moving these grapes from the producer to the ultimate consumer.

The information presented is based upon material collected on visits to selected retail stores made during the period August-October, 1948. Visitations were confined to independent and local chain stores located within the portion of California west of the Sierra Nevada Mountains. Thus, retail stores located in Alpine, Mono, and Inyo counties and restaurants, farmers' roadside stands, and national chain stores were excluded from the study.

A sample of 66 stores in the more densely populated and accessible areas of the state was visited six times--once each half month in August, September, and October. During early September, a single visit was made to 117 stores located in the relatively remote regions. In about two-thirds of the visits, grapes were sold and satisfactory data could be obtained. Thus, a total of 340 usable field interview schedules was secured--246 for northern California and 94 for southern California--representing a volume of 5,500 lugs.

The basic procedure for establishing the facts regarding the movement of supplies and distribution costs consisted of following each lot of grapes from the retail store back to the original producer. At each point in the distributive system prices and sources of supplies were noted. In addition, the retail proprietor or store manager was asked: "How many pounds were thrown away last week due to waste and spoilage?" and "What amount was sold last week?" The answers to these questions supplied information on spoilage loss and the weight to be attached to each store in the computation of certain weighted averages.

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Geographic location, city size, store size, and store type formed the basis for classifying the original schedules into various subgroups for which the data were summarized.1/

Among the significant findings to be discussed are:

1. Thompson Seedless grapes sold fresh in California retail stores come chiefly from south San Joaquin Valley--the major producing area.

2. A substantial portion of grapes sold by retailers in northern California are obtained directly from neighboring growers whereas only negligible quantities are so procured by retailers south of Tehachapi Mountains.

3. Almost the entire remaining quantity is handled by wholesalers. About half of the wholesalers' supplies come directly from growers and half from grower-shippers or packers.

4. Truck-jobbers, who handle only a small part of the fresh grapes delivered to retailers, are twice as important in northern California as in the southern portion of the state.

5. Striking variations in the sources of retailers' grape supplies exist due to the geographic location of stores. Retailers in large cities (except those in Sacramento and San Joaquin valleys) secure almost their entire supply from near-by wholesalers. Small city retailers obtain 30 per cent of the grapes they sell from producers, packers, truckers, and truck-jobbers, 10 per cent from small city wholesalers and 60 per cent from wholesalers in neighboring large cities.

6. Southern California retailers obtain the bulk of their grapes from Kern, Kings, and Tulare counties. Retailers in northern California are supplied primarily from producing areas north of those just mentioned.

7. Losses due to physical waste and spoilage are appreciable, averaging 2½ pounds from each 27-pound lug--i.e., about 9.3 per cent of the supplies shipped to retailers.

8. The cost of retailing--even apart from the spoilage factor--is an important element in the total cost of moving grapes to the consumer. About 34 cents of the retail dollar go to cover the retailers' margin.

9. The preretail margin is 31 per cent of the retail price. Packaging, transportation, and wholesaling accounted for 15, 7, and 9 cents, respectively, of the retail dollar.

1/ A more detailed description of the procedure used is given in Appendix A. Here, also, are given certain data from which the summaries appearing in the text tables were prepared. The precise meanings to be attached to the various terms used throughout the report appear in Appendix B. In some cases these are somewhat at variance with prevailing usage. For example, some dealers often called "jobbers" are, for convenience of this study, classified as "wholesalers."

10. Thus, about 35 cents of the consumer's dollar remained for growers to cover costs of production, harvest and field packing.

11. There are significant differences among stores with respect to their spoilage loss, retail margin, and consumer price. These variations can be partly explained by difference in the location, size, and type of stores considered. Generally, retail prices and retail margins were lower at cash-carry stores and to a lesser extent at large stores.

Channels of Distribution

A description of the channels through which fresh grapes, as well as other commodities, flow from producers to consumers includes two separate aspects. Various dealers bring together supplies from many producers and then disperse them among numerous retail outlets at which housewives make their purchases. These supplies move from producing areas to consuming markets along a variety of geographic paths.

Dealer Types.--The relative importance of the different dealer types handling California-produced fresh Thompson Seedless grapes sold through retail stores (exclusive of national chains) within the state is shown in figure 1. Material is shown separately for the northern and southern parts of the state as divided by the Tehachapi Mountains. Grower-shippers (producers who operate permanent packing sheds and grow at least half of the produce packed in these sheds) handle a relatively larger volume of the grapes sold at retail in southern California.

It will be noted that the principal channel for marketing fresh grapes is from the producer through the wholesaler to the retailer. A large portion of this quantity, especially in northern California, passes through the packer on its way to the wholesaler. Direct marketing, from producer to retailer, is substantial in northern California (21 per cent of the total retail volume) but negligible in the southern portion of the state.

Truckers and truck-jobbers handle only a small quantity of the grapes sold at retail. Both categories are appreciably more important in the northern portion of the state. Truckers, who usually buy a few commodities in the producing areas and resell them to other dealers (or retailers), account for about 6 per cent of the fresh grapes sold at retail in northern California and 2 per cent in southern California. About 9 and 4 per cent of retail sales in the northern and southern portions of the state, respectively, are moved through truck-jobbers, who generally buy a wide variety of items from wholesalers and resell to retailers along a regular truck route.

Table 1 indicates several striking differences in the retailers' source of grapes by dealer types. Producers and packers are an important source of supplies for retailers located in the Sacramento and San Joaquin valleys. They furnish almost 30 per cent of the grapes sold by retailers in large cities (Sacramento, Stockton, and Fresno) and approximately half of the volume handled by retail stores in rural areas and small towns of the interior valleys. Retailers in small cities of all parts of the state obtain a considerably larger portion of their supplies from truckers and truck-jobbers than do large city

b. Every effort is made to keep the children's daily routine as normal as possible by adhering to normal times of meals, rest periods, etc.

c. There are facilities for children who have to be kept in bed during the day. Each bed is provided with a bell push so that the child can call the nurse when necessary. Children who are well enough to get up are encouraged to do so, and are provided with a dressing gown and slippers.

Theatre of Operations

A theatre suite in the maternity department has been provided, as well as three delivery rooms. The theatre is equipped to undertake any operation that may be necessary during labour, and is staffed by a theatre sister and two theatre nurses. Each delivery room is also equipped with a bell push to summon the theatre staff when necessary.

Before labour — The midwife responsible for the patient should visit her before labour to ensure that she is familiar with the theatre routine. She should explain to the patient the reasons why it may be necessary for her to be taken to the theatre during labour, and should reassure her that the theatre staff will be present throughout the operation. She should also explain that the anaesthetic may be given by a specialist anaesthetist, or by the midwife herself, and that the baby will be looked after by a paediatrician. She should also explain that the patient will be visited by the anaesthetist before the operation, and that she will be asked to sign a consent form for the operation. She should also explain that the baby will be looked after by a paediatrician during labour whether or not the baby is born in the theatre.

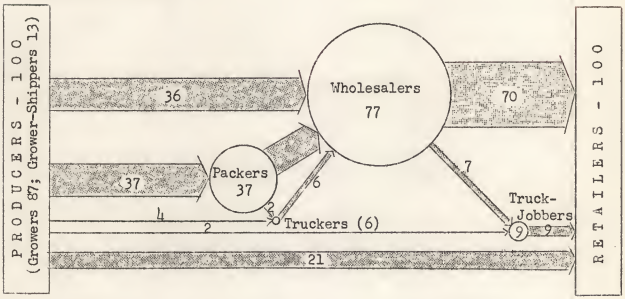
It will be noted that the midwife herself has nothing further to do with the operation beyond the preparation of the patient. A brief outline of what happens subsequently is included here, however, since the midwife is responsible for explaining these procedures to the patient. Should the baby be born in the theatre, the midwife delivers the baby and cuts the cord as in the normal delivery. She then hands the baby to the paediatrician who is present throughout the operation. The baby is then taken to the nursery for examination and treatment. The midwife remains in the theatre with the patient and delivers the placenta. She then assists the theatre staff in the operation, and is responsible for the patient's general welfare throughout the operation. She should remain with the patient in the recovery room until the patient is fully conscious, and should then accompany her back to the ward. She should also remain with the patient for the first hour after her return to the ward, or longer if necessary. She should then hand over the patient to the nursing staff on the ward, and report to the ward sister on the patient's condition.

Before the operation — The midwife should ensure that the patient has had nothing to eat or drink for at least six hours before the operation. She should also ensure that the patient has had a bath or shower, and that her hair is clean. She should also ensure that the patient has emptied her bladder before she leaves the ward. She should also ensure that the patient has removed her dentures, if she wears them, and that she has removed all her jewellery, including her wedding ring. She should also ensure that the patient has removed her nail varnish, as this is necessary for the anaesthetist to observe the colour of the patient's nails during the operation. She should also ensure that the patient has removed her contact lenses, if she wears them, and that she has removed all her hairpins. She should also ensure that the patient has removed her false eyelashes, if she wears them, and that she has removed all her make-up. She should also ensure that the patient has removed her wig, if she wears one, and that she has removed all her hairpins. She should also ensure that the patient has removed her false nails, if she wears them, and that she has removed all her nail varnish. She should also ensure that the patient has removed her artificial limb, if she wears one, and that she has removed all her jewellery. She should also ensure that the patient has removed her prosthesis, if she wears one, and that she has removed all her jewellery. She should also ensure that the patient has removed her hearing aid, if she wears one, and that she has removed all her jewellery. She should also ensure that the patient has removed her glasses, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her watch, if she wears one, and that she has removed all her jewellery. She should also ensure that the patient has removed her rings, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her bracelets, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her necklaces, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her earrings, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her brooches, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her hairpins, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her hair clips, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her hair bands, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her hair ties, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her hair slides, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her hair combs, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her hair grips, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her hair pins, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her hair clips, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her hair bands, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her hair ties, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her hair slides, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her hair combs, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her hair grips, if she wears them, and that she has removed all her jewellery. She should also ensure that the patient has removed her hair pins, if she wears them, and that she has removed all her jewellery.

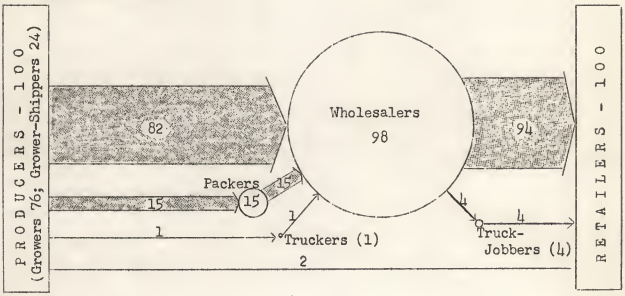
FIGURE 1

Marketing Channels for Fresh Thompson Seedless Grapes,
Northern California and Southern California, 1948

Northern California



Southern California



(Note: All numbers expressed as percent of total volume sold at retail)

TABLE 1

Retailers' Source of Fresh Thompson Seedless Grapes, by Dealer Types,[a]
California, August-October, 1948

Retail store location[b]	Producers and packers	Truckers and truck-jobbers	Wholesalers in	
			Large cities	Small cities
	1	2	3	4
	per cent of all dealer types			
Southern California				
Large cities	2.0	3.4	94.6	0.0
Small cities	0.0	8.9	89.0	2.1
All cities	1.3	5.3	92.7	0.7
Central Valley				
Large cities	28.3	2.6	69.1	0.0
Small cities	48.3	9.8	31.3	10.6
All cities	44.7	8.5	38.1	8.7
Coastal Northern California				
Large cities	2.5	0.0	97.5	0.0
Small cities	2.3	27.1	45.3	25.3
All cities	2.4	10.4	77.5	9.7
California				
Large cities	3.7	2.2	94.1	0.0
Small cities	16.5	14.1	58.3	11.1
All cities	9.3	7.5	78.3	4.9

a/ Classification of persons from whom retailers purchased their supplies.

b/ See figure 2 for geographic distribution of survey cities and Appendix B for definition of city size.

retailers. In summary, about 30 per cent of the grapes sold by small city retailers and 5 per cent of the volume handled by retailers in large cities comes from producers, packers, truckers, and truck-jobbers.

About 95 and 70 per cent of the grapes sold in large cities and small cities, respectively, move from wholesale markets to retail stores. The bulk of the grapes sold in small cities--especially in southern California--coming from wholesale markets are obtained from large city wholesalers. That is, there is a definite tendency for retailers in small cities to supplement grapes obtained directly from producing areas by supplies from wholesalers located in the larger cities. Small city wholesalers account for 2, 10, and 25 per cent, respectively, of retail sales in the small cities of southern California, the Central Valley, and coastal northern California.

Geographic Movement.--The production of Thompson Seedless grapes in California is largely limited to San Joaquin Valley, especially the southern counties. In 1948 about 56 per cent of the total bearing acreage was located in Fresno County alone, another 24 per cent was in the adjoining counties of Tulare and Madera. Other counties of the San Joaquin Valley account for almost all of the remaining 20 per cent of bearing acreage. The acreage in Riverside and Imperial counties (2.6 per cent of the state total) produces grapes marketed early in the season. These bearing acreage data for 1948 are summarized, on a county basis, in table 2.

Figure 2 shows the geographic distribution of survey cities and producing areas. This information is relevant to our discussion of the geographic movement of supplies for fresh sales to each of the three major subdivisions of the state.

As a consequence of this localization in production, the general geographic movement of supplies sold at retail within the state is from south San Joaquin Valley to metropolitan Los Angeles and metropolitan San Francisco. Actually, an important question requiring elaboration is: "How do supplies reach retailers?" That is, there needs to be some indication as to the relative importance of the different dealer types from whom retailers obtain their supplies and of the various producing areas from which grapes are secured.

Since variations in retailers' sources arise from differences in the geographic location of stores, the summary presented in table 3 shows the data for various retail store locations. These data reveal a definite tendency for Thompson Seedless grapes from the southern portion of the San Joaquin Valley to move to retailers in southern California and for supplies produced some 100 miles further north to be sold in retail stores of northern California.

Farm-to-Retail Margins

The producer, the retailer, and each intervening dealer handling Thompson Seedless grapes receive a portion of the final price paid by the housewife. Certain physical losses due to waste and spoilage are incurred during the process of moving supplies from producing areas to consuming markets. Both of these aspects of the distributive problem are to be considered briefly here.

In this description the term "margin" refers to the difference between the price paid by a handler (delivered to his premises) and the price received by

TABLE 2

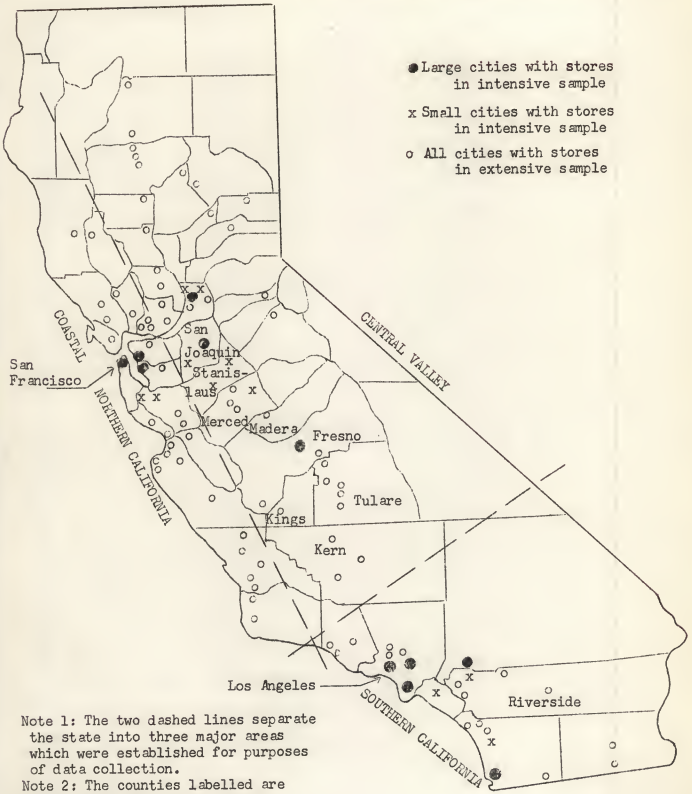
Bearing Acreage of Thompson Seedless Grapes by Counties, California, 1948

County	1,000 acres
Fresno	101.3
Tulare	29.8
Madera	13.1
Kern	11.4
Merced	9.9
Stanislaus	6.7
Kings	2.1
San Joaquin	.6
Other northern California	.5
Riverside	4.1
Imperial	.6
Other southern California	.1
California	180.2

Source: Unpublished data furnished (May, 1951) by the California Crop and Livestock Reporting Service.

FIGURE 2

Geographic Distribution of Survey Cities and Producing Areas



Note 1: The two dashed lines separate the state into three major areas which were established for purposes of data collection.
Note 2: The counties labelled are those with significant bearing acreage in 1948 (see table 2).

TABLE 3

Retailers' Source of Fresh Thompson Seedless Grapes, by Producing Areas,[a]
California, August-October, 1948

Retail store location[b]	Southern California	Kern, Kings, and Tulare counties	Fresno and Madera counties	Other northern California
	1	2	3	4
	per cent of all producing areas			
Southern California				
Large cities	4.1	68.3	27.6	0.0
Small cities	1.4	82.4	16.2	0.0
All cities	3.2	73.2	23.6	0.0
Central Valley				
Large cities	1.6	3.1	71.3	24.0
Small cities	0.0	15.5	34.7	49.8
All cities	0.3	13.3	41.3	45.1
Coastal Northern California				
Large cities	0.0	1.9	95.4	2.7
Small cities	0.0	7.7	89.7	2.6
All cities	0.0	4.1	93.2	2.7
California				
Large cities	2.6	41.8	53.3	2.3
Small cities	0.6	40.3	42.1	17.0
All cities	1.7	41.2	48.3	8.8

a/ Classification of areas producing the grapes ultimately sold at retail.

b/ See figure 2 for geographic distribution of survey cities and Appendix B for definition of city size.

the same handler (f.o.b. his premises). If the handler performs the transportation function, an estimate for the cost is deducted. Thus, "margin" refers to the charges made rather than the sum of expenses incurred for labor, rent, depreciation, etc.

Main Cost Components.--California consumers paid an average price of 10.6 cents per pound for Thompson Seedless grapes purchased at retail during the survey period. Approximately one-third of the consumer's dollar was accounted for by the retailer's margin--to reimburse the retailer's expenses and to compensate for spoilage occurring within the distributive channel. Another third covered all other distributive charges incurred in packing, transporting, and wholesaling. The final third was returned to growers to cover their production and harvesting costs.

The average lug leaving the farm contained 27.2 pounds of fruit, including 24.7 pounds sold to consumers and 2.5 pounds unmerchantable at retail because of spoilage loss. The quantity not sold due to waste and spoilage included both the amount thrown away while unpacking and additional grapes subsequently spoiled or damaged in the store. In other words, from a lug bought by the average retailer only 24.7 pounds were sold to consumers for $2.62, i.e., at approximately 10.6 cents per pound. The spoilage loss is shown as a part of the retailer's margin.

Almost half of the preretail distribution margin consists of charges for "packing and container." This item includes the cost of the container, hauling to the packing shed, cost of packing--whether performed by packers or by growers--and net profits for packers. About 30 per cent was accounted for by the "wholesaling margin," which includes all charges, fees, commissions, and net profits by dealers between packers and retailer. "Transportation"--less than 25 per cent of the preretail marketing charges--is considered as a separate item regardless of who performed the function.

"Farm price" is the residual obtained by subtracting the retail and preretail margins from the price charged consumers. It is specified at the farm gate in order to include the amount received by growers for harvested but unpacked grapes. When field packing was performed, however, the packing costs were included within the farm price.

The distribution of consumers' expenditures among these cost categories is shown in table 4. Total costs incurred in moving one lug of grapes through the entire distributive channel from the producer to the housewife are prorated between actual sales (90.7 per cent of the original lug) and the quantities not sold due to spoilage. In the last column appears the percentage distribution of costs. These figures correspond to the "per cent of the consumer's dollar" as this term is used by the U. S. Bureau of Agricultural Economics.

This information is portrayed in a somewhat different way by figure 3. Three blocks (proportional to the percentage distribution of the retail price) on the left indicate the major recipients of the consumer's expenditure ($2.62) for a lug of grapes leaving the farm. The physical division of these 27.2 pounds of fruit between the housewife and the garbage can is shown on the right. One bunch of grapes must be discarded by the retailer for every ten he sells to his customers.

TABLE 4

Main Cost Components for Fresh Thompson Seedless Grapes, California, August-October, 1948

Item	Costs for 24.7 pounds sold at retail (90.7 per cent of the original lug)	Costs for 2.5 pounds not sold due to spoilage[a] (9.3 per cent of lug)	Total costs (27.2 pounds leaving the farm and 24.7 pounds sold at retail)	Percentage distribution of costs for 27.2 pounds leaving the farm
	1	2	3	4
	dollars per lug (of 27 pounds) leaving the farm			per cent
Farm price (at farm gate)	.834	.086	.92	35.1
Packing and container	.354	.036	.39	14.9
Transportation	.172	.018	.19	7.2
Wholesaling margin	.218	.022	.24	9.2
Preretail margin	.744	.076	.82	31.3
Retail margin	.798	.082	.88	33.6
Total	2.376	.244	2.62	100.0
Retail price (cents per pound)[c]	10.6			

a/ Physical losses through waste and spoilage.

b/ Includes harvesting costs but excludes packing cost unless performed in the field.

c/ Retail price to the consumer: Total cost ($2.62) divided by volume of sales (24.7 pounds).

FIGURE 3

Distribution of Total Retail Value of Fresh Thompson Seedless Grapes
California, August--October 1948

FARM RECEIPTS
For each lug the grower receives
$.92

PRE-RETAIL MARGIN
For packaging, transporting and wholesaling
$.82

RETAIL MARGIN
To cover costs and spoilage
$.88

Total retail value per lug $2.62

From the average lug

90.7% goes to consumer

9.3% goes to garbage can

2.5 lbs. entering the retail store are, or become, unsalable due to spoilage

24.7 lbs. entering the retail store are sold at 10.6 cents per lb. (for a total value of $2.62)

Retail Margins.--As might be expected, there is considerable variation among stores with respect to their spoilage, retail margin, and consumer price. Appendix table A-3 presents these data for the survey stores classified according to geographic location, store size, and store type. Comparable data for selected larger store groupings are summarized in table 5. Variations in these factors can be partly, but only partly, explained by difference in the location, size, and type of stores considered. Fluctuations in retail prices are related directly to variations in retail margins and less closely to differences in spoilage losses.

Spoilage is about one-third greater in large than in small cities. There is also some tendency for these losses to be slightly higher in large stores, in cash-carry stores, and in northern California. More pronounced differences exist in retail prices and margins. The most noticeable difference is the considerable lower price and margin prevailing at cash-carry stores. The average retail price and retail margin were also smaller, though to a lesser extent, for stores in large cities than for those located in small towns and rural areas. In addition, the price charged by large stores, generally, was less than at small stores, although their retail margins were not appreciably less--indicating that the purchase price is somewhat higher for small stores.

In the large metropolitan centers of San Francisco, Los Angeles, and San Diego consumer prices, retail margins, and spoilage losses were considerably lower at cash-carry stores than at stores offering credit or delivery services. There did not, however, seem to be significant differences between large and small stores nor between grocery and fruit-vegetable stores located within these metropolitan areas.

Outside of the metropolitan centers, differences appear to arise from size of store rather than from whether credit or delivery services are offered.

Retail prices and spoilage were much higher for large fruit and vegetable stores than for large grocery and small stores located in the three large cities of the Central Valley (Sacramento, Stockton, and Fresno). In these cities retail prices, retail margins, and spoilage losses were somewhat lower at cash-carry stores; these differences were less pronounced than in the metropolitan centers.

For rural areas and small towns, no consistent differences in prices, margins, or spoilage between cash-carry and credit-delivery or large and small stores were observable. Geographic location of the city appears to be the main factor accounting for variations. Prices, margins, and spoilage losses are lower in small cities of southern California than in small cities of northern California.

Preretail Margins.--The spread between the farm price and the price paid by retailers consists of the wholesaling margin, transportation charges, and packing and container costs. The relative importance of these three segments of the preretail marketing margin has already been indicated. But it may be well to supplement the preceding summary information with additional detail for the three sets of data used in deriving the figures shown in table 2.

Wholesaling margins of wholesalers, truck-jobbers, and truckers are shown in table 6. The average margin was 22.6 cents per lug for wholesalers, 24.5 cents for truck-jobbers, and 39.6 cents for truckers. Possibly the most striking fact revealed by these figures is the considerable variation in the wholesaler's margin. Within the metropolitan centers of San Francisco, Los Angeles, and San

TABLE 5

Spoilage Loss, Retail Price, and Retail Margin on Fresh Thompson Seedless Grapes Sold at Retail, by Selected Store Groupings, California, August-October, 1948

Store type and area[a]	Store visits[b]	Volume reported[c]	Average spoilage loss[d]	Average retail price	Retail margin	
					Average[e]	As per cent of price[f]
	1	2	3	4	5	6
	number	lugs	per cent	cents per pound		per cent
All Store Types						
California	340	5,459	9.3	10.6	3.6	34
Southern California	94	2,302	9.0	10.3	3.0	29
Northern California	246	3,157	9.6	10.9	4.2	38
By Store Types (All California)						
Credit-delivery stores	152	1,370	8.8	12.1	4.9	40
Cash-carry stores	188	4,089	9.3	10.2	3.4	33
Large stores	221	4,675	9.4	10.3	3.5	34
Small stores	119	784	9.1	11.0	3.7	33
Stores in large cities	181	3,904	10.5	10.3	3.2	31
Stores in small cities	159	1,555	7.8	11.0	4.0	36
Metropolitan Los Angeles and San Francisco[g]						
Credit-delivery stores	44	727	10.3	13.0	5.4	42
Cash-carry stores	99	2,912	9.6	9.4	2.8	30
Sacramento, Stockton, and Fresno						
Large fruit and vegetable stores	7	61	16.6	14.2	3.9	27
Large grocery and small stores	31	184	9.8	9.9	3.2	32
Small Cities (All Store Types)						
Southern California	34	864	7.0	10.2	3.5	35
Northern California	125	891	8.3	11.5	4.3	37

a/ See Appendix B for definitions of store types and areas.
b/ Number of usable field schedules collected on separate visits to retail stores (excluding reports with inadequate data and visits which indicated that no grapes were sold).
c/ Quantity sold during the "last week" (i.e., the week prior to the date of fieldman's visit).
d/ Proportion of grapes thrown away during the week due to waste or spoilage.
e/ Difference between the retail selling price and the retailer's purchase price.
f/ Computed from unrounded data and may differ from column 5 divided by column 4.
g/ Including San Bernardino, San Diego, and San Jose.

Note: See appendix table A-3 for data on original store groupings.

TABLE 6

Wholesaling Margin[a/] for Fresh Thompson Seedless Grapes, by Dealer Types and Areas, California, August-October, 1948

Dealer type and area	Margin (per lug of 27.2 pounds)
	cents
Wholesaler	
Metropolitan Los Angeles	19.4
San Bernardino and San Diego	19.8
Metropolitan San Francisco and San Jose	22.5
Sacramento, Stockton and Fresno	39.2
Small cities	55.3
All California	22.6
Truck-Jobber	
Southern California	17.1
Northern California	28.1
All California	24.5
Trucker	
Southern California	39.6
Northern California	39.6
All California	39.6

a/ Includes all charges, commissions, and brokerage fees, except transportation charges. When transportation was performed by the dealer himself, an estimate of the cost is deducted.

TABLE 7

Packing and Container Costs[a/] for Fresh Thompson Seedless Grapes, California, August-October, 1948

Producing area	Growers	Grower-shippers	Packers
	cents per lug (of 27.2 pounds)		
San Francisco Bay	10.0		
Northern San Joaquin Valley	25.0		
Southern San Joaquin Valley	40.7	42.8	34.2
Southern California			41.0
All California	38.3	42.8	36.2

a/ Excludes harvesting costs and costs for field packing. Management income (net profit) is included for packers but excluded for growers and grower-shippers.

Diego, the difference between the wholesaler's selling and purchase price is only half as large as in other portions of the state.

Table 7 summarizes the packing and container costs for Thompson Seedless grapes, whether incurred by growers and grower-shippers or by separate packers. It will be noted that these costs are somewhat less for packers than for producers. These data exclude harvesting and field packing costs.

Cost incurred for transportation services averaged 18.9 cents per lug for the state as a whole. Such charges were considerably higher in southern California than north of the Tehachapi Mountains--23.1 compared to 14.4 cents.

Acknowledgments

An investigation of this type, based as it is on detailed analysis of hundreds of field interviews, requires the cooperation of many persons and groups. The author's indebtedness to those who helped in one way or another in this study is much greater than the brief summary nature of the report is likely to convey.

Alex Johnson of the California Farm Bureau Federation, Wendell Calhoun and D. B. DeLoach of the United States Bureau of Agricultural Economics, and Harry R. Wellman and Sidney S. Hoos of the California Agricultural Experiment Station helped immensely by their interest in the scope of the over-all investigation, general assistance in formulating plans, and helpful criticism throughout the study.

During its earlier phase, in 1948-1950, the analytical phases of the project were under the supervision of Walter D. Fisher. He assumed responsibility for editing the interview schedules, preparing the statistical tabulations and summaries, and developing suitable analytical methods. A great deal of the exploratory work for this report was completed by Dr. Fisher.

H. Fisk Phelps, Willard F. Williams, Robert V. Enochian, and George A. Jackson, Jr., all jointly employed by the Bureau of Agricultural Economics and the California Experiment Station, and Eldon Dye, Ralph Rush, and Irwin Rust of the California Farm Bureau were responsible for establishing and maintaining contacts with the trade and for collecting and editing the numerous statistical data. Mr. Williams was responsible for directing the field work of this investigation.

The compilation of many of the original data and the voluminous subsequent calculations and tabulations were performed largely by Dorothy Eaton, Mary Gouyon and Bernice Pfanner of the California Agricultural Experiment Station.

Finally, this study would have been impossible without the active cooperation of retail store managers, produce dealers, packers, and producers throughout California who generously furnished the detailed information requested on prices and sources of supply.

Appendix A

PROCEDURES USED

The Store Sample.--To obtain reliable information on channels of distribution and marketing costs, the sample of retail stores to be chosen was subjected to various controls--distribution of California population, income distribution within cities, store size, and type of store. In selecting the individual stores to be included particular attention was given to two considerations. It was desired to represent the entire geographic area of the state, exclusive of Alpine, Mono, and Inyo counties. This meant that stores located reasonably near main highways were chosen as a means of effectively utilizing the available time of the fieldmen doing the actual interviewing. In passing it should be noted that cities near major highways besides being conveniently located tend to be larger and, therefore, that more stores from such towns normally would be included in the sample. Secondly, the sample had to be limited to stores from which the required data would be given voluntarily and quickly because such information had to be secured directly from the store proprietor or manager. Actually, very few of the stores contacted refused cooperation.

Furthermore, since distributive channels were to be determined and described, certain sampling rates were deliberately introduced. For example, remote geographic areas, including mostly small stores, were included, even though certain time periods were overrepresented by this procedure. Yet, in this way, additional information was secured on channels of distribution that probably are not functions of time. Limitation of time and personnel precluded collection of data in remote and sparsely settled areas of the state as frequently as in the more accessible areas. It was also felt that more effort should be spent in obtaining information on sources of supply and channels of distribution for retail stores in sparsely settled areas because there is likely to be a wider range of types of channels used in these regions.

Accordingly, two sets of retail stores were used. One, called the intensive sample, covered a smaller area and was visited twice a month. The other, designated the extensive sample, covered a wider area and was visited once every six weeks. Figure 2 shows the geographic distribution of the 101 survey cities segregated into three groups (southern California, coastal northern California, and Central Valley region) for which separate interview routes were established. The cities and the number of retail stores included in the intensive and extensive samples of each of these three areas are listed separately in table A-1. These localities are arranged in the approximate order in which the successive stores were visited by the field representative in making his periodic visits.

A total of 66 retail stores in 22 cities was included in the intensive sample. Of these, 20 were located in metropolitan San Francisco, 11 in metropolitan Los Angeles, 19 in other large cities (with populations in excess of 50,000 inhabitants), and 16 in small cities. The extensive sample of 79 cities contained 117 retail stores. Only 5 of these stores were in large cities (Burbank and Glendale).

Stores located in Alpine, Mono, and Inyo counties and all farmers' roadside stands and restaurants were excluded. In addition, it was decided to not gather information from stores belonging to national chain store systems. Members of local chain store organizations, however, were included in the study.

TABLE A-1

Number and Location of the Sample Retail Stores

Area and city	Number stores	Area and city	Number stores	Area and city	Number stores
Intensive Sample (visited twice each month)					
Southern California		Central Valley		San Francisco Bay Area	
Los Angeles	7	Sacramento	5	San Francisco	10
Pasadena	2	Roseville	2	Oakland	5
Long Beach	2	Placerville	2	Berkeley	5
Santa Ana	1	Stockton	3	Palo Alto	2
San Bernardino	2	Tracy	1	San Jose	2
Riverside	2	Oakdale	1	Total	24
Escondido	1	Modesto	2		
San Diego	3	Merced	2		
Total	20	Fresno	4	Grand total	66
		Total	22	(for 22 cities)	
Extensive Sample (visited once in September)					
Southern California		San Joaquin Valley		Central Coast	
Ventura	2	Rio Vista	1	San Martin	1
Oxnard	1	Walnut Grove	1	Gilroy	1
Santa Paula	1	Galt	1	Hollister	2
San Fernando	2	San Andreas	1	Santa Cruz	3
Burbank	2	Sonora	1	Watsonville	3
Glendale	3	Turlock	1	Salinas	2
Banning	1	Gustine	1	Seaside	1
Corona	1	Los Banos	1	Monterey	1
Elsinore	1	Madera	2	Carmel	1
Fallbrook	1	Coalinga	1	Gonzales	1
Oceanside	1	Reedley	2	King City	1
Ramona	1	Dinuba	2	Paso Robles	2
Jacumba	1	Visalia	3	Atascadero	2
El Centro	2	Exeter	1	Santa Margarita	1
Brawley	2	Lindsay	1	San Luis Obispo	2
Indio	2	Porterville	2	Arroyo Grande	1
Total	24	Avenal	1	Santa Maria	2
		Wasco	1	Lompoc	2
		Taft	2	Total	29
		Bakersfield	3		
		Total	29		
		Sacramento Valley		North Coast	
		Fairfield	1	San Rafael	2
		Winters	1	Petaluma	1
		Woodland	2	Santa Rosa	2
		Auburn	1	Ukiah	2
		Grass Valley	1	Lakeport	1
		Marysville	2	Calistoga	1
		Williams	1	Napa	2
		Willows	1	Vallejo	2
		Oroville	1	Concord	1
		Chico	2	Livermore	1
		Orland	1	Total	15
		Corning	1		
		Red Bluff	2		
		Redding	2		
		Dunsmuir	1	Grand total	117
		Total	20	(for 79 cities)	

On the basis of supplemental information collected, each store was classified according to its geographic location, volume of sales, and type in order to permit a determination of whether significant differences in prices, margins, and spoilage exist for different subgroups. Store size was determined according to sales of all fresh fruits and vegetables during 1948. Stores with sales of fresh fruits and vegetables in excess of $25,000 were classed as large stores; small stores included those with a lesser volume of sales. In addition, information was gathered on store type (in accordance with the definitions listed in Appendix B). Each establishment was classed as an (1) independent or a (local) chain store, (2) a fruit and vegetable or a grocery store, and (3) a credit-delivery or a cash-carry store.

Data Collection.--Four fieldmen devoted full time to gathering the data needed for this study. On each visit to a retail store the field representative secured (for each fresh commodity included in the study)[1/] information on: (1) the volume of last week's sales, (2) last week's loss due to waste and spoilage, (3) the purchase and selling price of the produce being displayed, and (4) the source of the store's supplies. The data supplied on last week's sales and loss were used to determine the spoilage factor and the relative weights to be attached to each store in the computation of weighted averages. Information on prices and sources of supply was utilized for determining gross margins of retailers and dealers and for indicating channels of distribution.

Retailers specified dealers from whom current supplies of fresh fruits and vegetables were secured. These dealers were interviewed to obtain information on their own prices and sources of supply. Suppliers of the first dealers were then contacted to ascertain their prices and sources. This same procedure was repeated until the grower source was reached or until sources were traced back as far as possible. In the majority of cases the original source in the producing area could be ascertained.

By following the movement of each lot of supplies from the retail store back to the original producer, it was possible to double check the prices reported at the various points of the distributive system and to consider prices for individual lots. Where identity of the individual lot could not be retained, prices were obtained for the commodity, of a similar quality, handled on the same day as that on which the lot in question was handled. Not much substitution of this type was necessary except where dealers made mistakes in recalling their sources of supply. Thus, margins (the differences between selling and purchase prices) could be determined directly for individual transactions without using average market prices.

Weighting System.--The individual schedules provided the mass of information from which inferences were to be drawn regarding marketing channels and margins prevailing for California-produced fresh fruits and vegetables sold within the state. It was desired to show this information by geographic location, city size, store size, and store type. For this purpose the data from individual schedules were combined into average prices, average margins, average spoilage losses, etc., in two ways. The initial step consisted of summarizing the data for all visits within each subgroup (e.g., large grocery stores in metropolitan San Francisco) using "last week's" sales as weights. In merging the original groups into larger groups (e.g., all retail stores in northern California), the weights used were estimated retail sales of all fresh fruits and vegetables during 1948--given in table A-2.

1/ The commodities included were fresh asparagus, cantaloupes, carrots, celery, grapes, lettuce, oranges, peaches, pears, potatoes, and tomatoes.

The latter weights were secured on the basis of the distribution of California population in 1948 (as estimated by the U.S. Bureau of the Census) and on the distribution of sales of fresh fruits and vegetables among different store sizes and store types as obtained from the 1939 census of retail trade. This determination was made in the following way:

1. Sales of fresh fruits and vegetables for the various geographic areas and certain store types (see Appendix B) in 1939 were converted to a per-capita basis.

2. The estimated 1948 population for California was distributed among these areas according to the 1947 population distribution.

3. Dollar sales in 1948 were determined using the above information and assuming that retail prices in California increased during the decade (1939-1948) in the same ratio as United States prices, that per-capita physical consumption remained unchanged, and that 1939 percentage distributions by store size and store type were applicable to 1948.

The percentage weights determined in this manner are shown in table A-2. It is estimated that in 1948 total California retail sales of fresh fruits and vegetables (exclusive of the area east of the Sierra Nevada Mountains) are distributed almost equally between northern and southern California (48.7 vs. 51.3 per cent). In southern California 65 per cent of total sales occur in large cities and 35 per cent in small cities compared to 46 and 54 per cent, respectively, in the northern portion of the state. A slightly larger volume of fresh fruits and vegetables is sold in small stores than in large stores located in the small cities of the state. In the large cities, especially in southern California, however, a considerably smaller total volume of sales occurred in small stores.

Distribution Channels.--Three factors were expected to affect the source from which a retailer will secure his supplies. Accordingly, the sample stores were classified into 25 groups based on size of stores as measured by 1948 sales of fresh fruits and vegetables, the size of the city in which the store operates, and the geographic area where it is located.

For each category an estimate was made of the proportion of retailer's supplies coming from different sources (dealer or geographic). This estimate was obtained by recording the source of supply for the lot found in the retail store sampled on the day of the interview and weighting this source by last week's sales. It is believed that no significant error is introduced by this procedure, which assumes that there is no significant variation in the sources used by a retailer over the period of one week even though a considerable change may occur over longer periods of time. Channel percentages leading to each dealer type (e.g., wholesaler or truck-jobber) i.e., for stages preceding the retail level, were obtained in a similar manner. This procedure was followed backwards in the marketing process until the original producer sources were encountered.

These data provide information for showing the relative volume of the commodity ultimately sold at retail which was handled by different dealer types. Average percentages for southern California and northern California were computed using the weights specified in table A-2. The resulting composite figures were used in preparing the charts on marketing channels shown in figure 1 of the text. Table 3 indicates the relative importance of the various producing areas in

TABLE A-2

Estimated Distribution[a] of Fresh Fruits and Vegetables Sold at Retail, California, 1948

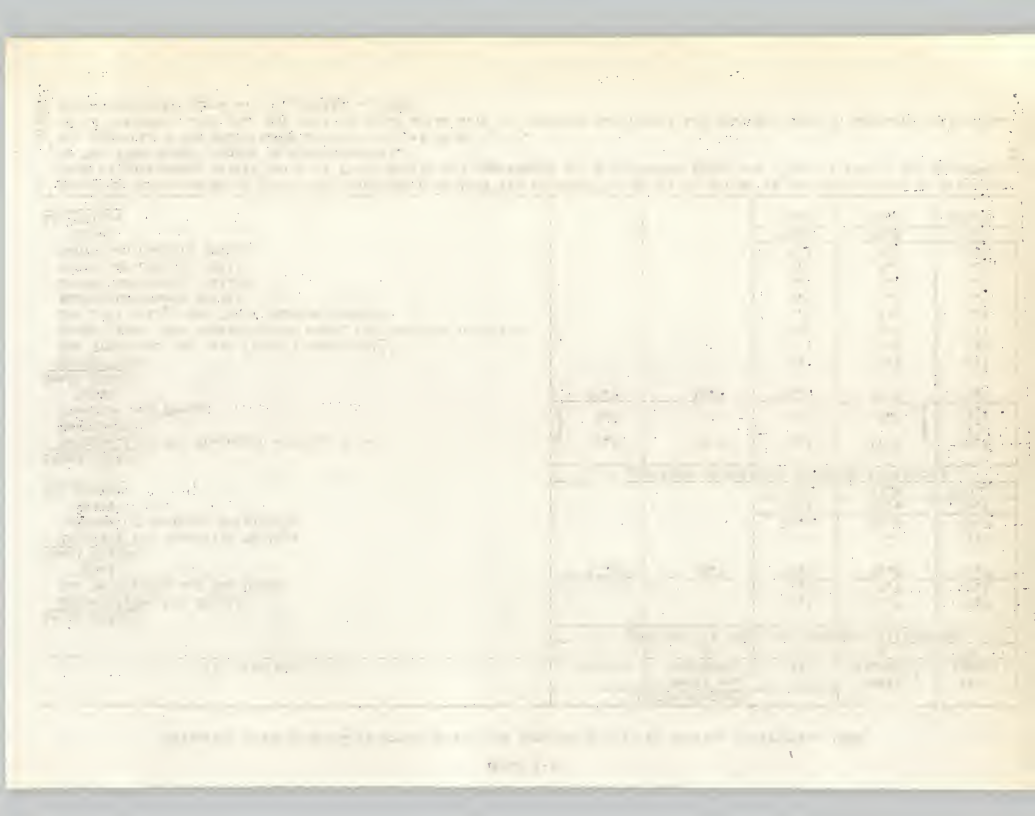
City size and area[b]	Large stores[b]			Small stores[b]	All stores
	Grocery	Fruit and vegetable	All		
	1	2	3	4	5
	per cent of sales in southern California[c]				
Large Cities					
Metropolitan Los Angeles			34.1	21.7	55.8
San Bernardino and San Diego			5.8	3.7	9.5
Total	17.2	22.7	39.9	25.4	65.3
Small Cities					
Imperial and Coachella valleys			.5	.5	1.0
Balance of southern California			15.8	17.9	33.7
Total			16.3	18.4	34.7
All Cities			56.2	43.8	100.0
	per cent of sales in northern California				
Large Cities					
Metropolitan San Francisco and San Jose	8.6	13.6	22.2	17.1	39.3
Sacramento	}				{ 2.8
Stockton and Fresno	2.3	.6	2.9	3.6	{ 3.7
Total	10.9	14.2	25.1	20.7	45.8
Small Cities					
North Coast			3.1	3.6	6.7
San Francisco Bay area (less 2 counties)[d]			4.2	4.6	8.8
Santa Clara, San Benito, Santa Cruz, and Monterey counties			3.3	3.8	7.1
San Luis Obispo and Santa Barbara counties			.9	1.0	1.9
North Sacramento Valley			2.8	3.2	6.0
South Sacramento Valley			2.7	3.1	5.8
North San Joaquin Valley			3.1	3.5	6.6
South San Joaquin Valley			5.3	6.0	11.3
Total			25.4	28.8	54.2
All Cities			50.5	49.5	100.0

a/ Based on distribution of California population in 1948 (as reported by the U. S. Bureau of the Census) and on distribution of California retail sales of fresh fruits and vegetables among different types and sizes of stores (as reported by the 1939 retail census of distribution).

b/ See Appendix B for definitions of areas and of store types.

c/ It is estimated that 51.3 per cent of total sales were in southern California and 48.7 per cent in northern California.

d/ Excluding Santa Clara and San Benito counties.



supplying retail stores in large and small cities of the three major California regions.

Marketing Costs.--In classifying the sample stores into subgroups for purposes of deriving marketing costs, a different grouping from that adopted for determining distribution channels was used. Larger geographic areas were established. The number of subgroups was increased, however, by making a further breakdown of large stores into grocery stores and fruit and vegetable stores and by classifying each store as an independent or a chain store and according to whether or not it offered some credit or delivery service.

Average retail prices, average retail margins, and average spoilage losses for the various subgroups were determined by combining the data obtained from the several individual store interview schedules for each category using "last week's" sales as weights. Table A-3 presents these results for all the groups together with the number of store visits and the volume reported. Data are also given for all store types in California, southern California, and northern California. These data are summarized for broader store groupings in table 5 of the text. Where larger categories of stores were established by merging the data for the original groups, the percentage weights listed in table A-2 were used.

The gross margin for each dealer was taken to be the difference between his selling price (f.o.b. his premises) and his purchase price (delivered to his premises). Where the dealer performed the transportation himself, a deduction for the estimated amount of the transportation cost was made. In addition, any brokerage fees paid were considered to be part of the wholesaler's margin. This procedure was followed in order to secure comparability as between wholesalers who employed independent brokers and those who employed their own salesmen.

Estimates of packing and container charges were obtained through personal interviews with growers, grower-shippers, and packers whose names were given in the tracing-back process previously described. "Farm production" is considered to include all costs up to the point where the commodity is brought to the farm gate or packing house door in a prepacked condition. Marketing costs are those expenses incurred after this point. Harvesting costs, therefore, are considered to be one item of production costs. Where picking was performed by the party doing the packing, an estimate for picking costs was made.

From these data it is possible to estimate the main cost components incurred in moving fresh produce from the grower to the consumer. This information is shown in text table 4 and figure 3. Tables 6 and 7 of the text summarize data on the wholesaling margin and on packing and container costs.

TABLE A-3

Spoilage Loss, Retail Price and Retail Margin on Fresh Thompson Seedless Grapes
Sold at Retail, by Store Type and Area, California, August-October, 1948

Store type and area[a]	Store visits[b]	Volume reported[c]	Average spoilage loss[d]	Average retail price	Retail margin	
					Average[e]	As per cent of price[f]
	1	2	3	4	5	6
	number	lugs	per cent	cents per pound		per cent
All Store Types						
California	340	5,459	9.3	10.6	3.6	34
Southern California	94	2,302	9.0	10.3	3.0	29
Northern California	246	3,157	9.6	10.9	4.2	38
Metropolitan Los Angeles, San Bernardino, and San Diego						
Credit or delivery	22	270	11.4	13.7	5.2	38
Cash and carry	38	1,368	9.5	8.9	2.0	23
Large--grocery	31	968	8.8	10.6	2.6	25
Large--fruit and vegetable	14	607	12.3	8.0	2.4	30
Small--all types	15	63	9.3	12.3	3.1	25
Metropolitan San Francisco and San Jose						
Credit or delivery	22	457	8.3	11.9	5.8	49
Cash and carry	61	1,544	9.8	10.2	4.2	41
Large--grocery	18	567	6.9	9.5	3.7	39
Large--fruit and vegetable	46	1,271	9.7	11.2	5.0	45
Small--all types	19	163	14.9	9.9	3.8	38
Sacramento, Stockton, and Fresno						
Credit or delivery	13	59	10.8	12.7	4.4	35
Cash and carry	25	206	12.9	10.8	3.1	29
Large--grocery	9	73	8.7	9.3	2.8	30
Large--fruit and vegetable	7	81	16.6	14.2	3.9	27
Small--all types	22	111	10.4	10.3	3.4	33
Small Cities--Southern California						
Credit or delivery	9	45	11.8	11.5	3.2	28
Cash and carry	25	619	6.8	10.7	3.5	33
Large	20	439	7.4	11.6	3.5	30
Small	14	225	6.6	9.0	3.5	39

(Continued on next page.)

Table A-3 continued.

Store type and area[a]	Store visits[b]	Volume reported[c]	Average spoilage loss[d]	Average retail price	Retail margin	
					Average[e]	As per cent of price[f]
	1	2	3	4	5	6
	number	lugs	per cent	cents per pound		per cent
Small Cities--North and Central Coast						
Credit or delivery	41	352	7.7	11.0	3.7	34
Cash and carry	18	162	8.8	12.2	5.4	44
Large--North Coast	8	70	10.4	11.2	4.5	40
Large--Central Coast	28	291	7.8	11.2	4.2	37
Small--North Coast	4	28	9.2	11.1	3.8	34
Small--Central Coast	19	125	7.0	11.9	4.2	35
Small Cities--Sacramento and San Joaquin Valleys						
Credit or delivery	45	187	6.9	12.2	4.7	39
Cash and carry	21	190	9.2	9.8	3.5	35
Large--Sacramento Valley	19	192	5.9	10.4	3.9	37
Large--San Joaquin Valley	21	116	12.3	11.1	4.2	38
Small--Sacramento Valley	13	33	6.1	14.6	5.4	37
Small--San Joaquin Valley	13	36	6.3	10.7	4.2	39
Independent Credit-Delivery Stores						
Southern California	31	311	11.5	13.4	5.0	37
North and Central Coast	61	790	8.0	11.5	4.9	43
Sacramento and San Joaquin valleys	55	234	7.9	12.3	4.6	37
Independent Cash-Carry Stores						
Southern California	53	1,453	9.1	9.4	2.5	27
North and Central Coast	73	1,525	10.3	10.5	4.4	41
Sacramento and San Joaquin valleys	44	300	11.5	10.3	3.3	32
Local Chain Stores						
Southern California	10	538	7.2	9.5	2.4	25
North and Central Coast	7	200	4.5	9.5	3.6	38
Sacramento and San Joaquin valleys	5	28	5.9	11.1	4.3	39

a/ See Appendix B for definitions of store types and areas.
b/ Number of usable field schedules collected on separate visits to retail stores (excluding reports with inadequate data and visits which indicated that no grapes were sold).
c/ Quantity sold during the "last week" (i.e., the week prior to the date of fieldman's visit).
d/ Proportion of grapes thrown away during the week due to waste or spoilage.
e/ The difference between the retail selling price and the retailer's purchase price.
f/ Computed from unrounded figures and may differ from column 5 divided by column 4.

Appendix B

DEFINITION OF TERMS

Two metropolitan areas are set up to include the cities of Los Angeles and San Francisco with their surrounding environments. The portion of California east of the Sierra Nevada Mountains (Alpine, Mono, and Inyo counties) was excluded from the study. The remainder of the state is divided into two major regions--southern California and northern California--by the Tehachapi Mountains Northern California is further subdivided into seven areas.

An arbitrary distinction is drawn between grower-shippers and growers. A "dealer" is defined so as to exclude retailers, producers, brokers, and common carriers. Four dealer categories are established--packers, wholesalers, truckers, and truck-jobbers.

Retail stores are classified according to volume of fresh fruits and vegetables sold, line of commodities handled, kind of business organization, and whether credit and delivery services are offered.

The precise definitions adopted for this study are listed below under three classifications.

Geographic Areas

Metropolitan Los Angeles: The cities of Los Angeles, Pasadena, Burbank, Glendale, Santa Monica, and Long Beach.

Metropolitan San Francisco: The cities of San Francisco, Oakland, Berkeley, Richmond, and Alameda.

Large Cities: Cities with 50,000 or more inhabitants in 1948.

Small Cities: Cities with less than 50,000 inhabitants in 1948.

Southern California: The portion of California lying south of the Tehachapi Mountains and east of Santa Barbara County, but including the city of Santa Barbara and immediate environments--that is, including the seven counties of Ventura, Los Angeles, San Bernardino, Riverside, Orange, San Diego, and Imperial, and the city of Santa Barbara and its immediate environments.

Northern California: The portion of California lying north of the Tehachapi Mountains and west of Ventura County, but excluding the counties of Alpine, Mono, and Inyo and the city of Santa Barbara and immediate environments--that is, all of the state lying outside the area defined as southern California, except the counties of Alpine, Mono, and Inyo which are excluded from the study. Northern California includes two subregions: coastal northern California (Central Coast, North Coast and San Francisco Bay area) and the Central Valley (Sacramento Valley and San Joaquin Valley).

Central Coast: The four counties of Santa Cruz, Monterey, San Luis Obispo, and Santa Barbara, but excluding the city of Santa Barbara and immediate environments.

North Coast: The eight counties of Marin, Sonoma, Napa, Lake, Mendocino, Trinity, Humboldt, and Del Norte.

Exhibit B

[illegible] Deed

[illegible]

San Francisco Bay Area: The six counties of San Francisco, San Mateo, San Benito, Santa Clara, Alameda, and Contra Costa, and the city of Vallejo.

South Sacramento Valley: The five counties of Solano (excluding the city of Vallejo), Yolo, Sacramento, El Dorado, and Placer.

North Sacramento Valley: The thirteen counties north of south Sacramento Valley and east of North Coast.

South San Joaquin Valley: The five counties of Kern, Kings, Tulare, Fresno, and Madera.

North San Joaquin Valley: The seven counties of Merced, Stanislaus, San Joaquin, Mariposa, Tuolumne, Calaveras, and Amador.

Dealer Types

Grower: A producer who is actually engaged in growing operations on land (either owned or rented) where the commodity is produced and who does not operate a permanent packing shed. He may pack produce by means of temporary facilities.

Grower-Association: A cooperation association established for the purpose of marketing or processing fresh fruits and vegetables produced by grower members. (A group of growers working together in harvesting and marketing a crop and jointly sharing in the receipts is considered a grower-association even though a formal association has not been legally established. As a guide, the field work was conducted subject to the rule that the informal group must include at least ten producer members before it was classed as a grower-association.)

Grower-Shipper: A producer who also operates a permanent packing shed and who grows more than 50 per cent of the produce packed in this shed. (Usually a grower-shipper is a large producer.)

Retailer: A person whose principal business is to sell to individual consumers, but excluding any producer who sells directly to consumers, except where such producer has an established retail outlet which is his major business.

Broker: An agent who does not have title to or physical control of the produce, but who negotiates sales and receives a brokerage or commission fee.

Dealer: A person whose principal business is to buy produce on his own account or to receive produce on consignment and to sell it to others, except individual consumers. (This is a general term intended to include packers, wholesalers, truckers, and truck-jobbers and to exclude retailers and producers, and also brokers and common carriers who do not take title to produce)

Packer: A dealer who assembles, packs, processes, loads, and/or ships produce, the major portion of such produce being bought from growers or handled for their account. (Usually, he operates a permanent packing shed. If a party grows more than 50 per cent of the produce packed, he is classified as a Grower, Grower-Association, or Grower-Shipper and not as a Packer.)

Wholesaler: A dealer whose principal business is to receive produce, store it, and resell it to others at an established place of business. (He may buy either from growers or other dealers and may sell either to retailers or other dealers. He may perform delivery service but must have an established place of business. If a dealer has no such facilities, he is classified as a Truck-Jobber.)

Truck-Jobber: A dealer who buys primarily from wholesalers, carries a wide variety of items per truckload, and sells only to retailers at their door. He may have storage facilities but does not sell on established premises. Usually a regular truck route is followed.

Trucker: A dealer whose principal business is to buy produce in producing areas, transport it, and resell it either to retailers or other dealers. He handles only a few items per truckload. (He may operate a fleet of trucks. If a party does not buy the produce outright or take it on consignment, he is not considered a dealer but as a person hired to perform transportation services.)

Store Types

Large Store: A retail store with sales of fresh fruits and vegetables amounting to over $25,000 during 1948.

Small Store: A retail store with sales of fresh fruits and vegetables amounting to $25,000 or less during 1948.

Fruit and Vegetable Store: A retail store whose principal business is to sell produce. (It may be a fruit and vegetable stand or store, or a leased department in a supermarket. The classification is according to management and operation and not building.)

Grocery Store: Any other retail store handling fruits and vegetables.

Local Chain Store: A single store unit of a group of retail stores, local to the area, centrally owned, and with some degree of centralized control of operation. (Stores of national chain systems are excluded.)

Independent Store: A retail store which is controlled by its own individual ownership or management rather than from without. (This designation refers to retail stores which are not units of national or local chain store systems.)

Credit-Delivery Store: A retail store offering credit and/or delivery services to its customers in connection with the sale of goods.

Cash-Carry Store: A retail store offering neither credit nor delivery services to its customers.